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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,669	02/25/2004	Christian Eichrodt	60705-1352	3020

24504 7590 04/16/2007
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EXAMINER

CORRIELUS, JEAN B

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/786,669

Applicant(s)

EICHRODT ET AL.

Examiner

Jean B. Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 35-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A goal to "preventing a transmission unit from forwarding a transmit signal that may result in a DC flow condition" is set forth in the preamble. However, the body of the claim does not include any limitation(s) directed towards that goal. It is unclear how the goal is met.

The limitation "may", recited in line 2, renders the claim vague and indefinite.

Claims 36-43 are likewise rejected because of their dependency to claim 35.

Specification

The disclosure is objected to because of the following informalities: Please update the status of the co-pending application mentioned in the specification. In addition, page 5 of the specification is missing.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 35, 37, 38 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Hallberg US Patent No. 5,537,100.

Hallberg teaches a method and apparatus comprising the steps of monitoring a data signal using circuit block 65 and generating a first signal in response to a data signal condition on line 61 see col. 10, lines 1-47 monitoring a clock signal (Hallberg teaches generating a clock signal by clock generator 40 and such a clock signal is monitored by monitoring devices 44 and 48, see col. 3, lines 10-15) and an enable disable signal is generated (see fig. 6, 104 or a turn off signal is generated see fig. 6, 114) in response to such a monitoring .

As per claim 37, Hallberg teaches a comparator 60 as part of the monitoring device. Such a comparator has to be a digital comparator since it performs processing on a digital signal.

As per claim 38, the first signal is a power down signal (turn-off) see fig. 7, box 150.

As per claim 41, Hallberg teaches that the second signal is a turn-off signal. See fig. 7 box 134. Note that by tuning off and on the system, a reset command is actually performed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg US Patent No. 5,537,100 in view of Kodra US Patent No. 6,226,663.

As applied to claim 35 above, Hallberg teaches every feature of the claimed invention but does not explicitly teaches the further limitation of a sigma delta modulator configured to provide the data signal. Kodra teaches a sigma delta modulator 12 configured to provide the data signal to monitor 22. Given that fact, it would have been obvious to one skill in the art to use a sigma delta modulator to produce the data signal so as to take advantage of the inherent property of the sigma delta modulator which makes the probability of encountering a long string of consecutive ones or zeroes during nominal operation to be very small.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg US Patent No. 5,537,100 in view of Cummiskey US Patent No. 4,353,128.

As applied to claim 35 above, Hallberg teaches every feature of the claimed invention but does not explicitly teaches the further limitation that the power down (turn-off) signal is generated in response to the data signal having an unchanging value. Col. 15, lines 39-41. It would have been obvious to one skill in the art to modify Hallberg by turning off the power when a data signal having an unchanging value is received so as to prevent the system from processing invalid data signal and at the same time to minimize power consumption.

8. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg US Patent No. 5,537,100 in view of Hicks US Patent No. 4,800,562.

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As applied to claim 35 above, Hallberg teaches every feature of the claimed invention but does not explicitly teaches the further limitation power down is generated by an asynchronous counter that reaches a maximum value. Hicks teaches further limitation power down is generated by an asynchronous counter that reaches a maximum value see col. 2, lines 42-52. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Hallberg in order to prevent the system from processing invalid data signal and at the same time to minimize power consumption.

9. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg US Patent No. 5,537,100 in view of Buer US Patent No. 6,188,257.

As per claim 42, as applied to claim 35 above, Hallberg teaches every feature of the claimed invention but does not explicitly teaches the further limitation generating the reset signal in response to a clock signal having a frequency that fails to exceed a predetermined minimum value. Buer teaches the further limitation of generating the reset signal in response to a clock signal having a frequency that fails to exceed a predetermined minimum value. See col. 1, line 65-col. 2, line 2. It would have been obvious to one skill in the art to incorporate such a teaching in Hallberg in order to prevent the system from processing invalid data signal and at the same time to minimize power consumption.

As per claim 43, Hallberg and Buer fail to teach the use of a monostable circuit to generate the reset signal. Note however that it is well known in the art to use a monostable circuit to generate a reset signal. Given that, it would have been obvious to one skill in the art to use a monostable circuit in Hallberg and Buer to generate the reset


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signal since such a circuit behaves well with other circuit components and is also easy to implement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jean B Corrielus
Primary Examiner
Art Unit 2611

4-12-07